

Reviews

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'*Ilāj bi'l-Tadbīr* (regimenal therapy): a core mode of Unani treatment

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Abstract: Since antiquity, the Unani system of medicine has been participating in health care system. Usually, four modes of treatment viz. regimenal therapy, dietotherapy, pharmacotherapy and surgery are applied for the treatment of diseases. Regimenal therapy is an important mode in which the morbid matter present in the body is either dispersed/excreted or its unnecessary production is blocked or its flow is restricted and the diseases are cured by natural healer of the body, consequently bring back the humoral stability. Nearly 30 regimens have been mentioned in classical Unani literature. Commonest regimenal procedures such as *fasd* (venesection/phlebotomy), *hijāma* (cupping), *ta'liq al-'alaq* (hirudotherapy/leech therapy), *ishāl* (purgation), *qay'* (emesis), *idrār-i-bawl* (diuresis), *huqna* (enema), *ta'rīq* (diaphoresis), *riyādat* (exercise), *dalk* (massage), *hammām* (bathing), *tadhīn* (oiling), *natūl* (irrigation), *sakūb* (douching/spraying), *inkibāb* (steam/vapour application), *takmīd* (fomentation) etc. are usually applied for the management of various ailments. These regimenal procedures are completely based on holistic approach and are potential but needs to be explored scientifically. This review outlines the therapeutic applications of various regimens of regimenal therapy used in Unani medicine.

Keywords: '*Ilāj bi'l-Tadbīr*; *istifragh*; morbid humours; regimenal therapy; Unani medicine.

Introduction

Unani medicine

The Unani system of medicine is one of the oldest systems of medicine which is basically pioneered in Greece, and later

been established in Rome, Arabs, Spain, Iran and Indian subcontinent. This system is based on the wisdom of Hippocrates (460–370 BC), chiefly on his doctrine of four humours such as *dam'* (sanguineous), *balgham* (phlegm), *safrā'* (yellow bile/bilious) and *sawda'* (black bile/melan-cholic) along with their qualities in terms of temperament such as hot-moist, cold-moist, hot-dry, and cold-dry, respectively. Moreover, the body of human being is consisted with seven indispensable materials like *arkān* (elements), *mizāj* (temperament), *akhlāt* (humours), *a'dā'* (organs), *arwāh* (pneuma), *quwā* (faculties) and *af'āl* (functions). An absence of any of the component threatens the survival and derangement in the constituents result diseases. Hence, the core aim is to restore the balance primarily by aiding bodily faculties' viz. *tabī'at mudabbir-i-badan* (medicatrix naturae) [1]. *Tabī'at* (Physis) is an individual strength to combat diseases and perform physiological functions of the body [2]. Six essential prerequisites (*asbāb-i-sittā zarūriā*) which include *hawā-i-muheet* (atmospheric air), *makoolāt va mashroobāt* (food and drink), *harakat-o-sukūn badnī* (physical activity and repose), *harakat-o-sukūn nafsānī* (mental activity and repose), *nawm-o-yaqza* (sleep and wakefulness) and *ehtibās-o-istifragh* (retention and elimination) are important for survival of anybody [3]. Various environmental, geographical and socioeconomic factors are considered as secondary essential factors (*asbab-e-ghair-zarūriā*) for life and indirectly influence the human body. Therefore, both primary and secondary prerequisites should be strictly considered while treating diseases [2]. The causes of diseases are basically classified into three categories viz. (i) *sū'-i-mizāj* (dys-temperament), (ii) *sū'-i-tarkeeb* (abnormal composition), and (iii) *tafarrūq-i-ittisāl* (derangement). *Sū'-i-Mizāj* refers presence of disease due to impairment in the temperament of an organ, system or whole body. *Sū'-i-mizāj* is further classified into two types viz. (i) *sū'-i-mizāj sāda* (dys-temperament not associated with morbid humours), (ii) *sū'-i-mizāj maddī* (abnormal substantial temperament) [4]. When three basic causes are present together, the disease condition is called *marz-i-murakkab* (compound/composite disease). In Unani

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medicine, the management of diseases is based on holistic approach with aim to treat body, mind, and soul.

Mode of Unani treatment

Four core modes of treatment are usually employed in Unani medicine such as ‘*ilāj bi’l-tadbīr*’ (regimenal therapy), ‘*ilāj bil ghizā*’ (dietotherapy), ‘*ilāj bi’l-dawā*’ (pharmacotherapy) and ‘*ilāj bi’l-yad*’ (surgery) [3] (Figure 1). The regimenal therapy is one of the imperative sort of Unani treatment by which the morbid substances are dispersed within the body or excreted from the body through natural orifices and the humoral equilibrium is restored by the *tabī‘at* (physis) [5].

‘*Ilāj bi’l-Tadbīr*’ (regimenal therapy)

‘*Ilāj bi’l-Tadbīr*’ is consisted with two words of Arabic language i.e. ‘*ilāj*’ which refers treatment and ‘*tadbīr*’ means ‘regimen’. In Unani system of medicine, several regimenal procedures mostly drug-less therapy and some regimens with incorporation of drugs are preferred for the management of various body ailments [6]. Through such regimens the dietary habit and life style of the patients are modulated [7]. Several classical Unani literatures viz. *Kamil al-Sanā* also known as *Kitāb al-Malikī* (The Complete Book of the Medical Art) [8] written by ‘Ali Ibn al-‘Abbas al-Majusi popularly known as Haly Abbas [9] (10th Century AD) [10, 11], *Al-Qanūn fi’l Tib* (The Canon of Medicine) compiled by Ibn Sina famous by Avicenna (980 – 1037 AD) in West [12],

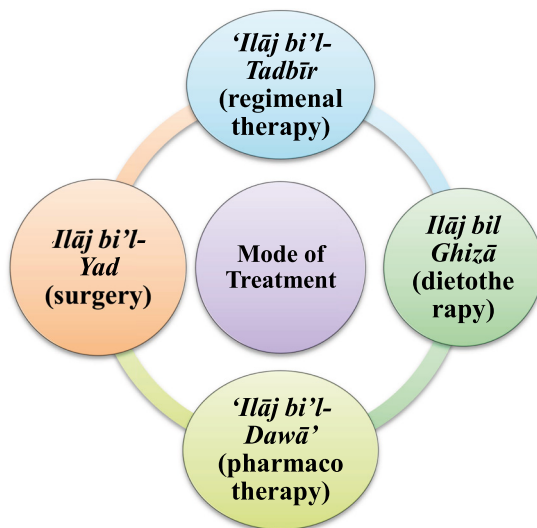


Figure 1: Modes of Unani treatment.

Firdaus al-Hikmah (Paradise of Wisdom) written by Abu al-Hasan Ali ibn Sahl Rabban al-Tabri (838 – 870 AD) [13], *Kitāb al-Mukhtarāt fi’l Tib* compiled by Ibn Hubal (1121 – 1213 AD) [14], *Kitāb al-Umdā fi’l Jarāhat* written by Ibn al-Qaff (1233 – 1286 AD) [15], *Kitāb al-Tasrīf* authored by Abu al-Qasim Khalaf ibn al-Abbas al-Zahrawi (936 – 1013 AD) also known as Abulcasis in West [16], *Kitāb al-Kuliyāt* compiled by Ibn Rushd also called as Averroes in Europe (1126 – 1198 AD) [17], *Zakhīrā Khawārizam Shahi* authored by Ahmad al-Hasan Jurjani [18], ‘*Ilāj al-Amraz*’ written by Hakim Muhammad Shareef Khan (1722 – 1807 AD) [19], *Al-Qarabadeen* written by Kabeeruddin etc. have described various regimenal procedures [20] (Table 1).

Individual regimen

(1). *Istifragh* (Evacuation of morbid humours)

The diseases are caused by either dystemperament with or without involvement of morbid humours [12]. The morbid matters are evacuated through various regimenal

Table 1: Various regimenal procedures.

S. No.	Regimen	S. No.	Regimen
1.	<i>Istifragh</i> (Evacuation of morbid matters) [12]	16.	<i>Sakūb</i> (Douching or Spraying) [12]
2.	<i>Fasd</i> (Venesection) [12, 14–16]	17.	<i>Inkibāb</i> (Steam application) [19, 20, 40]
3.	<i>Hijāma</i> (Cupping) [12, 15, 16, 21]	18.	<i>Pāshoya</i> (Foot bath) [19, 20]
4.	<i>Ta’līq al-‘Alaq</i> (Hirudotherapy) [12, 14, 16, 18, 27]	19.	<i>Aabzān</i> (Sitz bath) [20]
5.	<i>Qay’</i> (Emesis) [12, 14, 18]	20.	<i>Ubtan</i> (Skin cleansing) [20]
6.	<i>Ishāl</i> (Purgation) [10, 12, 13, 18]	21.	<i>Dimād</i> (Paste) [14, 19, 20]
7.	<i>Idrār-i-Bawl</i> (Diuresis) [18]	22.	<i>Tilā’</i> (Liniment) [12, 14, 18]
8.	<i>Ta’rīq</i> (Diaphoresis)	23.	<i>Huqna</i> (Enema) [12, 14, 18]
9.	<i>Imāla</i> (Diversion of morbid humours) [30]	24.	<i>Dhūnī</i> (Fumigation) [19]
10.	<i>Riyādat</i> (Exercise) [11, 12, 17, 18]	25.	<i>Nafūkh</i> (Insufflation)
11.	<i>Dalk</i> (Massage) [12, 17]	26.	<i>Lakhlakha</i> (Inhalation) [19]
12.	<i>Hammām</i> (Bathing) [12, 17, 21]	27.	<i>Humūl</i> (Pessary) [13, 20]
13.	<i>Tadhīn</i> (Oiling)	28.	<i>Qairūtī</i> (Poultice) [12, 20]
14.	<i>Takmīd</i> (Fomentation) [36]	29.	<i>Kaiyy’</i> (Cauterization) [12, 14–16]
15.	<i>Natūl</i> (Irrigation) [14, 19, 20, 27]	30.	<i>Īlām</i> (Pain induction)

procedures or uses of drugs. *Istifragh* is done by various methods such as *fasd* (venesection), *hijāma* (cupping), *ta'liq al-'alaq* (hirudotherapy), *ishāl* (purgation), *qayi'* (emesis), *idrār-i-bawl* (diuresis), *huqna* (enema), *ta'rīq* (diaphoresis), *riyādat* (exercise), *hammām* (bathing) etc.

Ibn Sina has made 10 rules for evacuation of morbid matters from the body (Table 2). These rules must be followed while performing *istifragh*. The amount of morbid matters to be evacuated is judged from the amount of morbid humours already evacuated, strength of the patient and clinical features of the disease. It is also mentioned that the morbid humours should readily be evacuated when they are present in the vessels than joints and tissues [12].

(2). *Fasd* (Venesection/Phlebotomy)

Fasd is a general mode of removal of excessive quantity of morbid humours present mainly in the blood vessels. This procedure should be done when the blood is so super-abundant and the disease is about to develop. These cases are initial stage of sciatica, podagra, or any arthritic condition due to abnormal blood state, danger of haemoptysis from rupture of a blood vessel in a rare field of lung, persons on the verge of epilepsy, seizure due to epilepsy, pharyngotonsillitis, internal inflammatory masses, bleeding piles, amenorrhoea etc. Phlebotomy should not be performed before the age of 14 or after 70 years and in those young who are emaciated. The Unani physicians have also mentioned various contraindications where this therapy should not be performed. Ibn Sina has suggested that phlebotomy is to be done on different veins according to the indications [12] (Table 3).

Table 2: Rules of *istifragh*.

Conditions	Indications/contraindications
Plethora	It should be done when morbid humours are present in the body.
Vitality	It should be avoided when any of the three vital faculties of the body are weakened.
Temperament	Contraindicated in case of hot and dry temperament of the body.
Symptoms	Contraindicated in case of diarrhoea or cramps.
Physique	Contraindicated in case of excessive leanness or fatty body.
Age of the patient	It is avoided in children and old age.
Weather condition	Avoided during extreme hot or cold weather.
Geographical position	Contraindicated in hot tempered areas.
Habit	It should be avoided when habit of the patient is to have evacuations frequently.
Occupation	Contraindicated in washer men and labourers [12].

In modern era, this regimenal therapy has been discarded because some studies have suggested that after phlebotomy certain pathological conditions are developed but thousand year observation of Unani physicians, it cannot be discarded merely on the basis of modern studies which have been carried out on small sample size. Hence, more studies may be carried out on large sample size to validate scientifically this old age regimen [4].

(3). *Hijāma* (Cupping)

Razi has defined that cupping is a regimenal procedure in which morbid matter is evacuated from the superficial small blood vessels located in the muscles [21, 22]. This regimenal procedure is mentioned in the Ebers Papyrus (1550 BC). Hippocrates has recommended the cupping therapy for the treatment of musculoskeletal disorders of back and extremities, pharyngitis, gynaecological, ear, and lung diseases [23]. *Hijāma* is classified into two types: (i) *Hijāma bi'l Shart* (cupping with scarification), and (ii) *Hijāma bilā Shart* (cupping without scarification) [15, 23] (Figure 2).

(i) ***Hijāma bi'l Shart* (Cupping with scarification):** In this type, small incisions are made on the skin and blood is evacuated using cups/glasses by creating negative pressure. Ibn al-Qaf Al-Maseehi has described certain guidelines for this procedure viz. (i) for prophylactic purposes, it should be performed in mid lunar month because the humours are agitated in this period, (ii) evening time should be preferred, (iii) hot weather should be preferred because the humours are not viscid in this season and evacuates easily, (iv) it should not be performed in those patients whose blood is viscid, (v) before performing this procedure, stomachic should be given to the patient, (vi) it is

Table 3: Sites of phlebotomy.

Site/vein	Indications
Frontal veins	Heaviness of the head and eyes & chronic headache
Supraoccipital veins	Ulcers of the scalp
Temporal veins	Tortuous vein
Labial veins	Gum ulcers, gingivitis
Sublingual veins	Angina and tonsillar abscess
Jugular veins	Angina, dyspnoea, asthma, lung abscess
Post auricular vein	Glaucoma; ulcers of ear, neck and back of the head
Popliteal vein	Decrease menstrual flow, painful piles, anal pain
Vein over the inner toe	Sciatica, uterine diseases
Saphenous vein	Decrease menstrual flow, piles, sciatica [12]

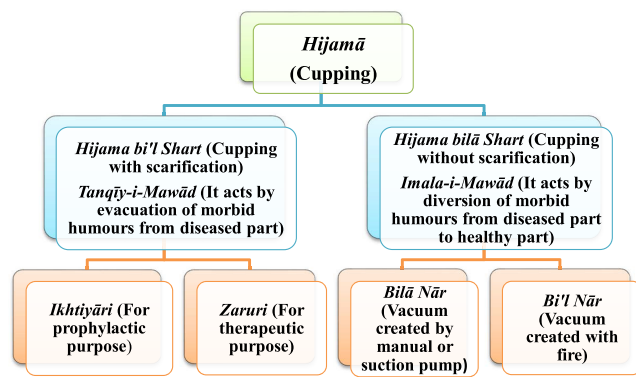


Figure 2: Types of hijama (cupping).

contraindicated in obese patients, (vii) it should not be performed before the age of 2 and after 60 years, (viii) it should be avoided just after bath, coitus and physical exertion [15]. Several points where cups to be applied have been pointed out according to diseases by Unani physicians [12] (Table 4).

(ii) **Hijamā bilā Shart (Cupping without scarification):**

In this type, incision is not made and blood is not evacuated from the body. Cups or glasses are applied on the body surface by creating vacuum through pump or fire. Ibn Sina has suggested that the use of fire is more advantageous [12]. This procedure should be done following general evacuation of morbid humours from the body. In this regimen, the morbid humours are diverted from diseased part to the healthy part, and in case of dislocation of an organ the anatomical position may be corrected. This therapy is given for the treatment of many diseases viz. (i) plethoric condition, where the morbid matter needs to be diverted, (ii) deep seated abscess for suction of the pus, (iii) to increase temperature of any organ, (iv) flatulence, (v) displacement of an organ, (vi) severe pain, (vii) atrophied organ etc. [15].

Scientific studies have suggested that the cupping therapy possesses significant therapeutic effect in many diseases. Khan et al., 2013 has reported the significant effect of cupping therapy in overall management of knee osteoarthritis, particularly in pain relief, swelling, joint stiffness and disability compare with control drug (acetaminophen) [24]. Al-Bedah et al., 2015 has reported the significant effect of wet cupping therapy in decreasing pain and recovering disability in cases of persistent non-specific low back pain, at least for two weeks after stoppage of the therapy [25].

(4). **Ta'liq al-'Alaq (Hirudotherapy/Leech Therapy)**

The small quantity of blood is withdrawn from the body by using medicinal leeches. This regimen was in the practice 3,500 years back in Egypt and in other ancient civilizations such as Greek, Mayan, Aztec, and Rome. In Greek, this therapy was first practiced by eminent physician, scholar and philosopher, Hippocrates (460 – 370 BC) [26]. In India also, this therapy was very much popular in olden days [18]. Various species of leeches are found including *Hirudo medicinalis* and *Hirudo granulosa* which are considered to have medicinal properties [26]. Ibn Sina and Ismail Jurjani have mentioned the peculiar features of toxic leeches which should not be used for treatment purposes. These features are broader head, grey/green colour, body hairs etc. [18, 27]. Toxic leeches may produce local inflammation, syncope, haemorrhage, fever [18, 27], paralysis and malignant ulcers [27]. Leeches obtained from the pond which found algae and frogs, better for use [18, 27]. It is advised that when the leech is hesitant for attachment, a small prick may be made by needle on the skin surface to produce few drops of blood which result keen attachment of the leech [28]. In this regimen, the morbid matter is evacuated from the body and maintains the homeostasis. Scientific studies have revealed that the anti-coagulant substances such as hirudin, calin, histamine-like vasodilators, collagenase, hyaluronidase etc. present in the saliva of leeches, responsible for various pharmacological actions [26]. This regimen procedure is very much beneficial in the treatment of especially skin diseases such as alopecia, ring worm [18, 27], non-healing ulcer, varicose vein, elephantiasis, psoriasis, warts, eczema etc. The leech therapy is also recommended for the treatment of some other diseases such as arthritis, pharyngitis, lymphadenitis, sinusitis etc. Certain scientific reports have revealed that the leech therapy possesses significant effects in many diseases. For example, a clinical study conducted in Germany in which the leech therapy has showed significant effect in cases of knee osteoarthritis compare to that of local application of diclofenac. An experimental study in animal model showed the significant thrombin inhibition effect of hirudin in antigen induced arthritis as the intra-articular fibrin was decreased [26].

(5). **Qay' (Emesis)**

It is a mode of evacuation of morbid matter in which gastric contents are expelled through mouth. Sometimes, this regimen is used in healthy individuals for prophylactic purposes to clean the stomach. Hippocrates has depicted that emesis is the best regimen amongst all other regimenal procedures except purgation especially for evacuation of the phlegmatic humour particularly from the lower part of

Table 4: Sites of cupping with scarification.

Point of application	Indications
Nape of neck	Heaviness of eyelids, itching of eyes, foul smell of mouth
Between the shoulder blade	Pain in upper arms and throat, congestion in the lower oesophageal junction
Over the two posterior neck veins	Tremor of head; diseases of head, face, teeth, ear, eye and nose
Legs	Cessation of menstrual blood
Under the chin	Diseases of head, teeth, throat and jaw
Over the loins	Inflammatory masses in upper part of thigh, gout, piles, elephantiasis, diseases of uterus & bladder, renal congestion
In front of thigh	Orchitis, leg ulcers
Behind hips	Inflammatory conditions and ulcers of buttocks
In popliteal fossa	Aneurysm, long standing abscess or ulcers in leg & foot
Over malleoli	Cessation of menses, sciatica, gout
Over the buttocks towards the anus	Draws morbid humours from whole body, diseases of intestine [12]

the body. He further stated that it should be performed in two consecutive days in a month in healthy persons. The therapeutic indications of emesis are inflammatory conditions, oedema, jaundice, tremor, paralysis, dyspnoea, gout, melancholia, leprosy [18], obesity, ulcers of kidney and bladder etc. [12]. Excessive emesis may cause gastric weakness [18].

(6). *Ishāl* (Purgation)

Usually three humours such as phlegm, bile, and black bile are evacuated through purgation. Many drugs which possess properties to evacuate different humours are used for this purpose. For instance, *Convolvulus scammonia* and *Polypodium vulgare* are the drugs of choice to evacuate bilious humour [12]. *Citrullus colocynthis*, *Operculina turpethum* and *Colchicum luteum* are given to evacuate phlegmatic humour whereas *Helleborus niger* is used for evacuation of melancholic humour [10]. Purgative drugs evacuate morbid humours in association with the attractive faculty related to the given humour; may be attracting the coarse and rejecting the subtle humour. This attraction is going on until the morbid humour reaches the stomach and intestines, which finally excrete through anal route [12]. Certain guidelines have been made for this regimenal therapy viz. (i) it should be avoided in extreme hot and cold conditions, (ii) the dose of the drug should be according to the body strength, (iii) small dose of purgative should be given in hot tempered regions, (iv) after purgation, hard physical work and sexual intercourse should be avoided, (v) following

administration of purgative drug, the patient should be advised to walk for a brief period [13], (vi) it should be avoided in case of weak strength of vital faculties, (vii) purgation should not be given in case of excessive plethora, (viii) purgative drugs should not be given in case of weakness of stomach and intestine, (ix) it should be avoided in deafness etc. [18].

(7). *Idrār-i-Bawl* (Diuresis)

This is also a natural excretory route of human body. In many disease conditions, this route is chosen for evacuation of morbid matters. This mode of regimen is preferred with incorporation of diuretic drugs in cases of joints pain, backache, dizziness, ascitis etc. Usually *Cucumis melo*, *Cucumis sativus*, *Trachyspermum ammi*, *Nigella sativa*, *Foeniculum vulgare* etc. are used for this purpose. Excessive diuresis should always be avoided as it may produce injury in the urinary tract [18].

(8). *Ta'riq* (Diaphoresis)

It is a kind of evacuation of waste products from the body through sweating. This is achieved through certain processes such as hot fomentation, hot bath, poultice, exercise, massage, inhalation etc. and also by using certain drugs internally such as *Foeniculum vulgare*, *Piper cubeba*, *Coriandrum sativum*, *Elettaria cardamomum*, *Achillea millefolium*, *Ruta graveolens*, *Crocus sativus*, *Piper nigrum* etc. This regimen is also useful to reduce body temperature in case of fever and to increase nutrition of the skin [29].

(9). *Imāla* (Diversion of morbid humours)

As per Unani concept, sometimes the *mawād* (morbid matters) is present in vital organs and accumulation of large amount of such matters may cause weakness of vital functions of the body. In this condition, these morbid substances are diverted from vital organs to the less important organs of the body where such matters may be dispersed within the organ and evacuation is not needed. Cupping without scarification is performed for this purpose [30]. *Imāla* is of two types: (i) *imāla-i-qareeb* (diversion of morbid humours to the adjacent organ), (ii) *imāla-i-ba'eed* (diversion of morbid humours to the remote organ) [6, 18, 30]. When the morbid humours are freshly accumulated and not agitated in an organ, in this condition such humours are diverted to the adjacent organ and in case of vice versa these are diverted to the remote organ from the affected part [30].

(10). *Riyādat* (Exercise)

Exercise is one of the important regimens described in classical Unani literature. After moderate exercise, innate heat of the body is increased which plays role for normal functions such as proper digestion and excretion of excretory substances from the body [11]. Ibn Sina has depicted the benefits of exercise viz. (i) it provides normal function to all

the organs and gives strength to the body, (ii) digestion and absorption of the food are good, (iii) nutrition is improved due to increase innate heat of the body, (iv) it clears pores of the skin, (v) it removes different excreta from the body etc. Unani physicians have recommended various forms of exercises: (i) strenuous exercise, (ii) wrestling, (iii) boxing, (iv) marching, (v) running, (vi) jumping, [12] (vii) swimming, (viii) horse ridding, (ix) dancing etc. [18]. Apart from exercise of whole body, exercise of individual organ is also recommended such as singing and vociferation for respiratory system, inspecting of minute object for vision, hearing of weak and loud sound for ear. The best time for exercise is considered as when the body is free from excreta, so that there is no risk to disperse unhealthy chyme throughout the body. Sometimes, massage is recommended before exercise [12].

(11). *Dalk* (Massage)

Massage is done by pressure, friction or rubbing of the body with hand or rough cloth [31]. The waste products from almost all the organs are excreted through skin following body massage. Unani physicians have classified massage into various types [17] (Figure 3). Friction massage is done as preparatory to athletes. The aim is to disperse waste products formed in the muscles and not excreted through exercise [12]. Sometimes, massage is advised before commencing the exercise to prepare the body for undergoing different movement during exercise. In this case gentle to vigorous massage should be carried out. This special type of massage is known as *dalk-i-istidād* (preparatory massage). In some cases, it is advised that gentle to moderate massage to be carried out after exercise which is known as *dalk-i-isterdād* (relaxing massage) [29]. Some scientific studies have revealed the significant effect of massage therapy. Zarnigar et al. 2012 has reported the significant effect of massage therapy with *Roghan Qust* (a Unani pharmacopoeial formulation) in cases of post stroke hemiplegia, particularly improvement in the Fugl-Meyer upper limb score [32]. Amanullah et al. 2011 has revealed the significant effect of massage with *Roghan Seer* (Garlic oil) (a Unani pharmacopoeial formulation) in voluntary movements and basic mobility of the lower limb in patients of post stroke hemiplegia [33]. Lone et al. 2011 has reported the significant effect of massage with different medicated oils in cases of musculoskeletal and nervous system disorders [34].

(12). *Hammām* (Bathing)

A special type of *hammām* was in practice in ancient time. A traditional *hammām* (bath room) should have four compartments with varied temperature viz. first, second,

third, and fourth rooms should be temperate, warm, hot, and cold, respectively. The air of *hammām* (bath room) gives warm and the water gives moistening effects to the human body [12]. This regimen opens the skin pores [21], excrete waste products through skin, increase appetite, resolve morbid humours inside the body [17] and refresh the body [21]. This is also very much useful to reduce body temperature in case of hectic fever. Prolong stay in the bathroom should be avoided because it may produce syncope, nausea, reduce innate heat, and loss of libido [12]. (13). *Tadhīn* (Oiling)

In this regimen, medicated oil such as *Roghan Babuna*, *Roghan Qust*, *Roghan Malkangni*, *Roghan Seer*, *Roghan Kaddu*, *Roghan Kahu*, *Roghan Banafsha* (all are Unani pharmacopoeial preparations) etc. is locally applied on an organ. This regimen is recommended to relieve pain, to improve nutrition of skin and to divert morbid matters from the diseased parts of the body [35].

(14). *Takmīd* (Fomentation)

In this regimen, powder drug is tied in a piece of cloth and used in the form of fomentation locally after heating. This therapy relieves pain and resolve inflammatory swelling of an organ [6]. Unani pharmacopoeias have mentioned several formulary which are used in the form of hot fomentation for the treatment of many diseases. For instance, hot fomentation with *Papaver somniferum* seeds, aqueous rose water, and turpentine oil is beneficial in mastitis [36].

(15). *Natūl* (Irrigation therapy)

In this regimen, the medicated decoction or oil [37] is irrigated over the diseased part from some vertical height. Some amount of drug may penetrate through skin [19, 20] and helps in dispersing of morbid matters [38]. Thereafter, the morbid matters may be detoxified either by the body itself [7] or it may be excreted through natural excretory route. Ibn Sina has stated that this regimenal therapy is very useful for the treatment of many ailments including diseases of head [27]. In case of increase body temperature, irrigation of cold water is to be done to decrease the temperature [10]. Athar et al. 2018 has revealed the significant efficacy of a combination therapy of *natūl* and massage by *Roghan Kaddu* and internal use of medications such as *Itrifal Ustukhuddus*, *Itrifal Kishnizi* and *Jawarish Shahi* in a case of migraine without aura [39].

(16). *Sakūb* (Douching or Spraying)

This regimenal procedure is performed usually over the head or some other parts of the body. In this regimen, medicated decoction or plain water is spraying from a close distance to the affected part to disperse the morbid

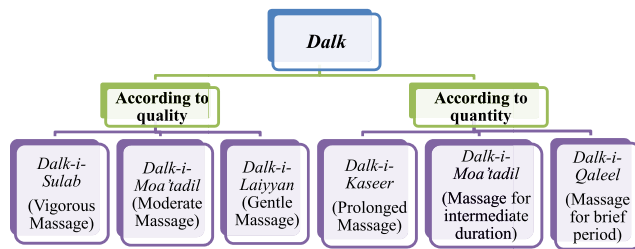


Figure 3: Types of dalk (massage).

matters. The spray may be carried out using a jug or similar vessel or in the form of spray or shower. Sometimes, it is performed to change the temperamental state of an organ [12]. It is also a form of irrigation therapy in which spraying is done gradually whereas in irrigation therapy the douching is done rapidly. Sometimes, rapid or quick irrigation may cause some difficulties to the patient [43].

(17). *Inkibāb* (Steam/vapour application)

Inkibāb therapy is a form of steam application over the affected parts of the body. In this regimen, some herbal drugs are boiled into a vessel and the steam is applied to the body surface [5, 40]. Unani pharmacopoeias have described several formulary which are used as *inkibāb* therapy for the treatment of many illnesses. Steam application with decoction of *Origanum vulgare*, *Papaver somniferum* seeds, *Viola odorata*, *Coriandrum sativum*, *Smilax china* is useful in the treatment of earache [19]. Steam application with decoction of *Azadirachta indica* leaves is also beneficial in the treatment of earache [20]. Athar et al. 2017 has reported the significant effect of steam application with decoction of *Butea monosperma* flowers in combination with massage cupping in a case of non-specific low back pain [5].

(18). *Pāshoya* (Foot bath)

In this regimen, the foot is immersed in medicated decoction for the treatment of various bodily ailments. Foot bath in the decoction prepared with *Acacia arabica* leaves, barley's flour, *Althea officinalis* flowers, *Solanum nigrum*, *Viola odorata* flowers and *Nympha alba* flowers is effective in cases of severe headache and insomnia [19, 20].

(19). *Aabzān* (Sitz bath)

It is one of the types of bath in which lower part of the body especially buttocks and hips are immersed into plain or medicated water [41]. This regimen is very much useful in the treatment of intestinal, rectal, anal, prostate, kidney, urinary bladder, urethral, testicular, vaginal, and uterine diseases [20]. Majusi and Ibn Sina have advised that the hot

sitz bath is useful in cases of difficult labour. Four types of sitz bath viz. hot, cold, moderate, and compound (alternate hot & cold) along with decoction or infusion of herbs are commonly given for treatment purposes. The possible mechanism of action in case of hot sitz bath is increased blood flow and metabolism of the affected area which causes diversion of morbid humours, and promotes healing, whereas in case of cold sitz bath, the effect is vasoconstriction which causes decrease oedema in case of inflammatory condition and may also cease external haemorrhages [41].

(20). *Ubtan* (Skin cleansing/Body scrub)

In this regimen, paste of cosmetic herbs is applied over the face or other parts of the body to give fairness. Commonly preferred drugs are *Sterculia urenus*, flour of barley, *Vicia feba*, pea, *Cicer arietinum*, *Lens culinaris*, *Prunus amygdalus*, *Cucumis melo* etc. [20].

(21). *Dimād* (Medicated Paste)

It is a kind of medicated paste which is prepared with powder of crude drugs and oil [2, 20]. This is used as local application to resolve inflammatory swelling and pain of various organs of the body [2]. Medicated paste prepared with pomegranate flower & peel, rose, *Inula racemosa*, *Swertia chiraita*, alum and oil is very much useful for the treatment of headache [19, 20].

(22). *Tilā'* (Liniment)

The liniment is a very useful remedy which reaches the affected part of the body itself. It is prepared with herbs, oil and cloth or plaster, and topically applied to the diseased part. After application, the drug penetrates through skin or mucous membrane. The liniment is made with plaster, coriander and crushed barely, which is useful for the treatment of scrophulous lesions [12]. The liniment is made with oil and lukewarm water, applied over the abdomen to relieve constipation [18].

(23). *Huqna* (Enema)

The enema is an excellent remedy for evacuation of faecal and other morbid matters from the intestines. In Unani medicine, enemas containing different drugs are given to relieve colicky pain of abdomen, pain caused by renal or urinary bladder diseases; and to subside inflammatory conditions of abdominal organs [12]. The enema may be preferable when purgatives are contraindicated such as weakness of stomach and intestine [18].

(24). *Dhūnī/Bukhoor* (Fumigation)

In this regimen, crude drugs are burnt and their smoke is inhaled [19]. Sometimes, the smoke of crude drugs is also given to the affected parts other than inhalation [35]. Hkm. Shareef Khan has advised that sindoor (red oxide of lead)

spreads over the paper, burn it and inhale the smoke which is useful in the treatment of migraine [19]. Likewise, smoke of *Atropa belladonna* root is useful in the treatment of toothache [35].

(25). *Nafūkh* (Insufflation/Blowing of powder drug into a body cavity)

It is a specific regimenal procedure in which the fine powder of single or compound drug is sprinkled into the ear canal, nose, throat or any other orifice of the body through air pressure with the help of specially designed equipment [42]. This regimen is preferred for the treatment of mainly ear, nose, and throat diseases [35]. Arif et al. 2018 has reported the significant effect of *nafūkh* therapy with *Balsamodendron myrrha*, *Boswellia serrata*, Borax, *Berberis aristata* and alum in cases of otomycosis [42].

(26). *Lakhlakha* (Inhalation)

Some aromatic solid or liquid drugs are kept in a bottle and inhaled. In this regimen, the drug goes to the alveoli and absorb in the systemic circulation [35]. Unani pharmacopoeias have mentioned several formulary which are used in the form of inhalation for the treatment of many diseases. For instance, *Santalum album* and dried coriander kept in the bottle and add aqueous water of rose and vinegar in it, and inhale in cases of headache [19].

(27). *Humūl* (Pessary)

In this regimen, the fine powder drug is mixed with oil or wax or honey [20] and applied over the cloth or cotton, and used in the form of pessary for the treatment of vaginal, urethral, and anal diseases [35]. The pessary is prepared with fine powder of Murdar sang (litharge), rose oil, pomegranate flower is effective in the treatment of uterine diseases [13].

(28). *Qairūtī* (Poultice)

This is a topical application of oil with or without containing some drugs to the affected part, but the chief ingredient of poultices is wax or oil [20]. The most useful poultices are those made with flour of orobs boiled in vinegar and dried before use. Sometimes, poultices are made with hot oil [12]. Poultice made with wax, *Lagenaria siceraria* oil, *Viola odorata* oil, aqueous part of *Malva sylvestris* leaves, aqueous part of *Althea officinalis* leaves, *Trigonella foenum greacum*, mucilage of *Linum usitatissimum*, and white part of egg is beneficial for the treatment of convulsion [20].

(29). *Kaiyy'* (Cauterization)

The cauterisation is considered a very useful method of treatment since ancient time. Unani physicians have recommended this regimen for various therapeutic purposes viz. (i) to prevent spreading of a destructive lesion, (ii) to break up putrefactive matters present in the tissues, (iii) to restrain the blood flow, (iv) to increase the temperature of a cold organ etc. In olden days, cautery of golden made was in use [12].

(30). *Īlām* (Pain induction)

In this regimen, sensory nerve endings are stimulated either by compression or tying of an organ [6]. Sometimes, the pain is induced by using stimulant or irritant drugs. After application of such procedures, the blood vessels of the affected area are dilated and blood circulation is increased resulting stimulation of sensory nerve endings. This regimenal procedure may be useful for the treatment of certain diseases such as hypoesthesia, anaesthesia, pain, swelling etc. [35].

Conclusion

The Unani system of medicine is fundamentally based on Hippocratic doctrine of four humours viz. *dam'* (sanguineous), *balgham* (phlegm), *safrā'* (yellow bile/bilious) and *sawda'* (black bile/melancholic) with their temperamental qualities such as hot-moist, cold-moist, hot-dry and cold-dry, respectively. According to Unani concept, the diseases are basically caused by either qualitative or quantitative abnormalities of these humours. In order to treatment of diseases, such morbid humours should be evacuated from the body or diverted from the diseased part to the other parts of the body to restore the humoral balance. This phenomenon of treatment is achieved by using different modes of Unani treatment such as regimenal therapy and pharmacotherapy. Regimenal therapy is one of the important modes of Unani treatment which plays pivotal role in the health care system. Several regimens such as *fasd* (venesection/phlebotomy), *hijāma* (cupping), *ta'liq al-'alaq* (hirudotherapy), *qay'* (emesis), *ishāl* (purgation), *idrār-i-bawl* (diuresis), *ta'rīq* (diaphoresis), *riyādat* (exercise), *dalk* (massage), *hammām* (bathing), *tadhīn* (oiling), *natūl* (irrigation), *sakūb* (douching/spraying), *inkibāb* (steam/vapour application), *takmīd* (fomentation), *aabzān* (sitz bath), *pāshoya* (foot bath), *dhūnī* (fumigation), *nafūkh* (blowing of powder drug into a body cavity), *lakhlakha* (inhalation), *tilā* (liniment), *ubtan* (body scrub), *dimād* (medicated paste), *qairūtī* (poultice), *kaiyy'* (cauterization), *ilām* (pain induction), etc. have been recommended by Unani physicians for the treatment of various bodily ailments. Unani physicians have also mentioned their proper indications, site of applications, contraindications, standard operating procedures, complications and mechanism of action on the basis of Unani principles. But, in the present scenario, only few scientific studies on certain Unani regimens have been carried out to validate them. Detailed studies regarding mechanism of action and well-designed standard operating procedures of regimenal procedures, supported by scientific studies in order to open new therapeutic avenues, and

world wide acceptance would help in the safe and efficient application of these regimens.

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